



**Pushing a New Paradigm  
Creative Transitions to Sustainable  
Futures**

**across all the well-beings**

**Follow up to 2018 Series (Take 1)**

**CWEA joined up to the World  
14<sup>th</sup>, 17<sup>th</sup>, 21<sup>st</sup> May, 2018**

**Join the conversation:** <https://cwea.arlo.co/courses/288-sustainabilitycreative-transitions-to-sustainable-futures-we-need-to-change-things-but-how-come-and-help-work-on-new-ideas-and-models-for-a-sustainable-future>

## Abstract (from 2018)

# Instigating a New Paradigm - Creative Transitions to Sustainable Futures across all the Well-Beings

In three evenings, we will explore joined-up approaches to **economy, society, place-making, kaitiakitanga**, best ecological practice, and how to inspire society and culture on this fragile planet to change course. Should be easy! We will interrogate the latest insights on **global trajectories and emerging crises**, structured around the standard 'well-beings', then conduct a **visioning exercise** addressing the need for radical solutions, their shape and implications. The focus will shift to defining and designing **practical transitions from BAU to soft-landings** onto a **sustainable future**. We will critically explore ideas that are evidence-based, life-affirming, reality-checked and within the comfort zone of real people - across cultures, religions, ethnicities, and personalities. A big ask? And **we can only make a start**, but this and follow-up **discussion will direct and refine research questions** around trends, consequences, sustainable needs, optimal design and acceptability of change. The precautionary principle and the need for urgent change suggests global society needs to have a **Plan B** ready for when near future governments desperately ask 'what can we do'? **Our method will be interactive** – using techniques of collaborative learning and **co-creation of solutions to wicked problems**; we will acknowledge and employ existing groups and initiatives in the city and around the world (not start from scratch). We will work the crowd to get your input. Our objective here in Ōtautahi-Aotearoa is to be a **beacon** that shines through the gloom.

# Creative Transitions to Sustainable Futures

across all the well-beings

## GENERAL INTRODUCTION (from 2018)

- **Your hosts tonight** (tangata whenua, WEA, ecologists, soil scientists, engineer, sociologists, economist, systems specialists and you; many from Manaaki Whenua)
- **Setting the scene** generally
- **Course Framework**
- **Personal Introductions** – background, interests, what you hope to get from course (1 minute 😊)
- Introduction to the **topic of the night**
- Facilitated discussions around **goals/visions** (Nick Kirk)
- Facilitated discussion around **transitions & step designs**



# Intro for 2019 Series – Take 2

Framework for WEA Evening Class

## Creative Transitions to Sustainable Futures

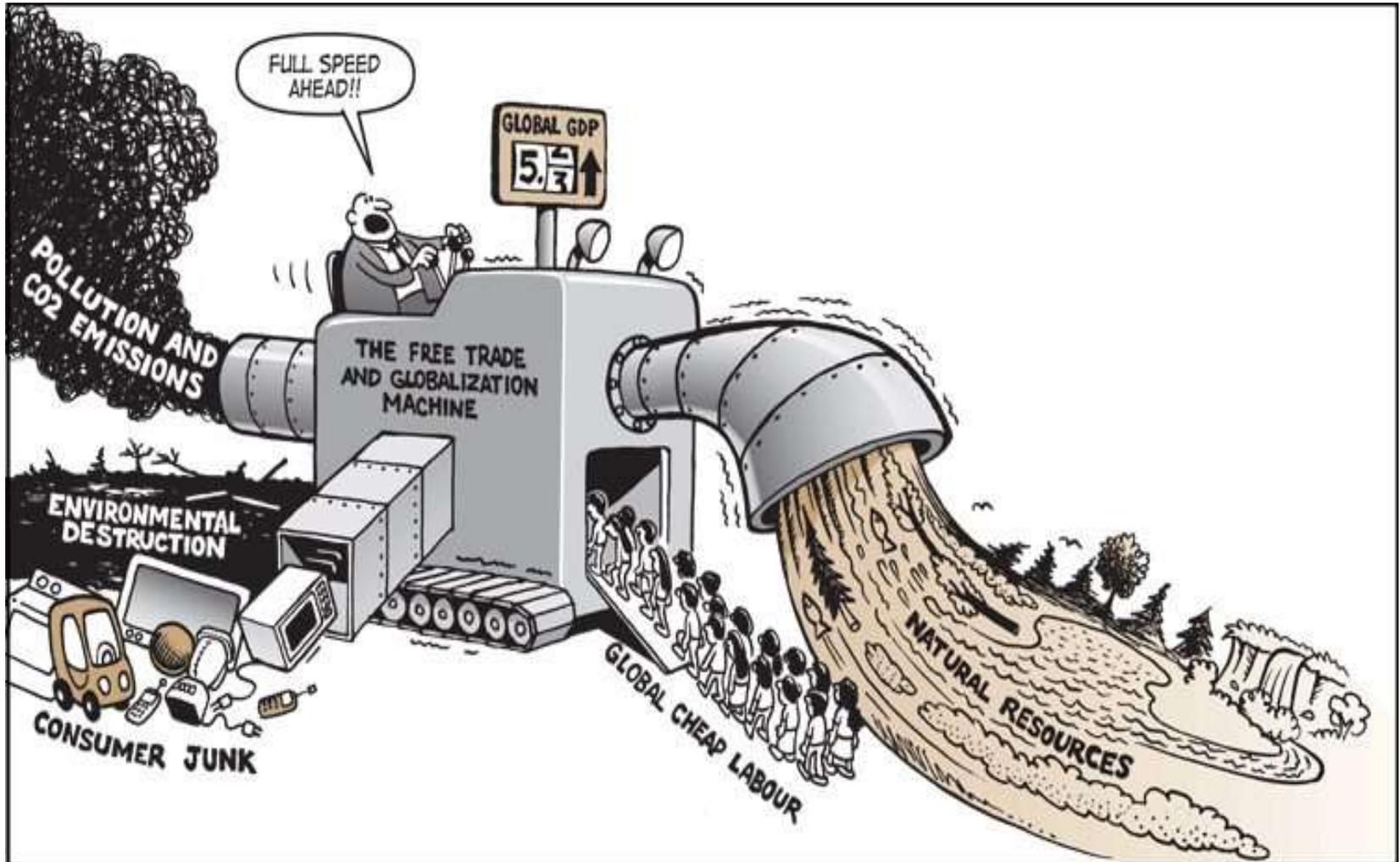
Designing Stepping stones from BAU to SSF

**6 Bottom Lines:** Pillars of Sustainability/Well-beings

A series of Facilitated discussions

- **Eco-sphere (13<sup>th</sup> March)**
- **Psycho-socio-cultural sphere (20<sup>th</sup> March)**
- **Econo-sphere (27<sup>th</sup> March)**

A quick reminder of some of material presented/discussed under the topic of the ecology/land/biodiversity last year (2018)



# Our World without Economic Growth

SCIENCE & TECHNOLOGY : Energy, Economics, Business

2010•04•14 Christopher Doll United Nations University

8 Comments

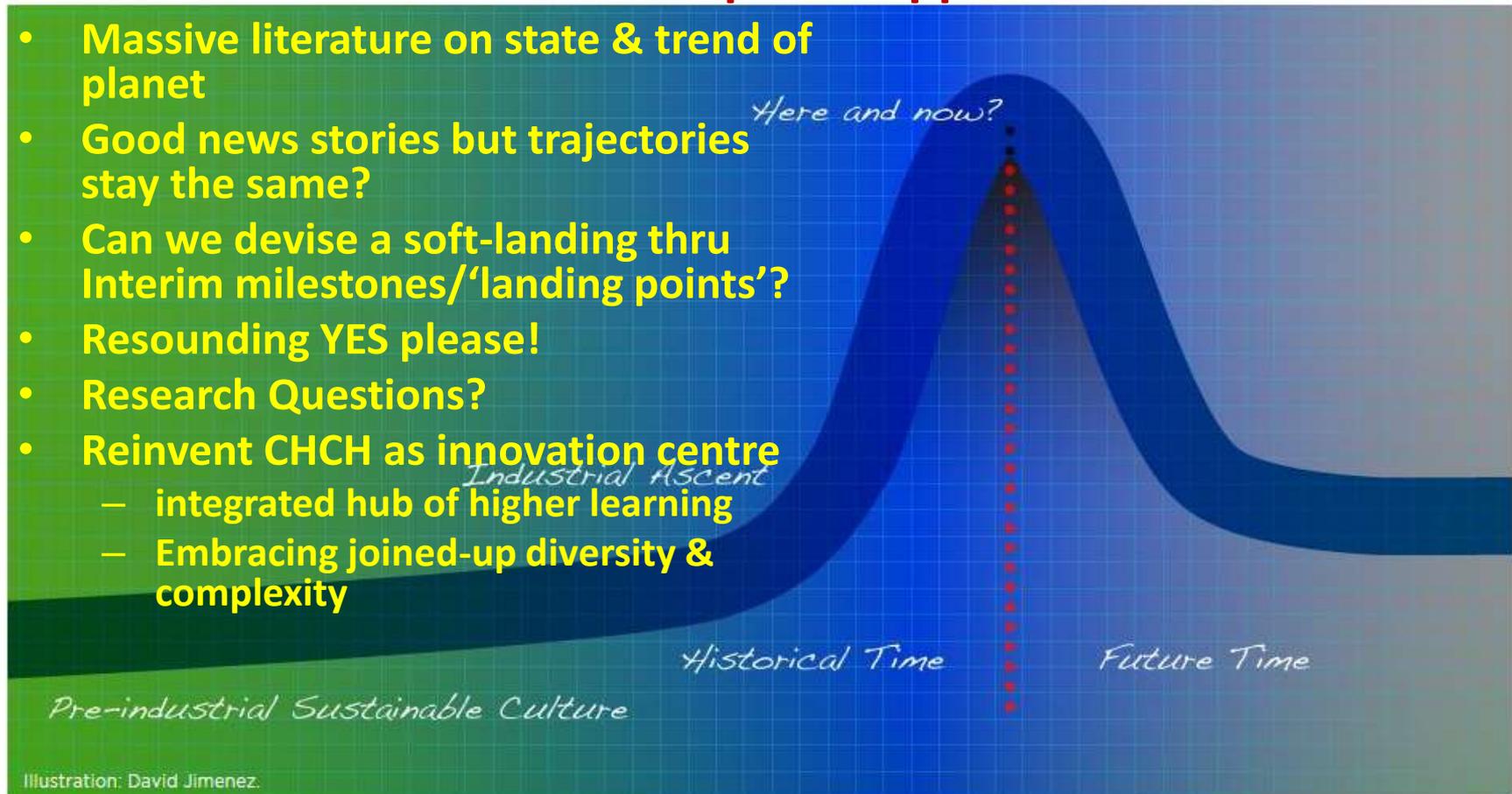
Email

Tweet

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**Peak oil, peak cow, peak potable water, peak arable land, peak money peak happiness !!??**

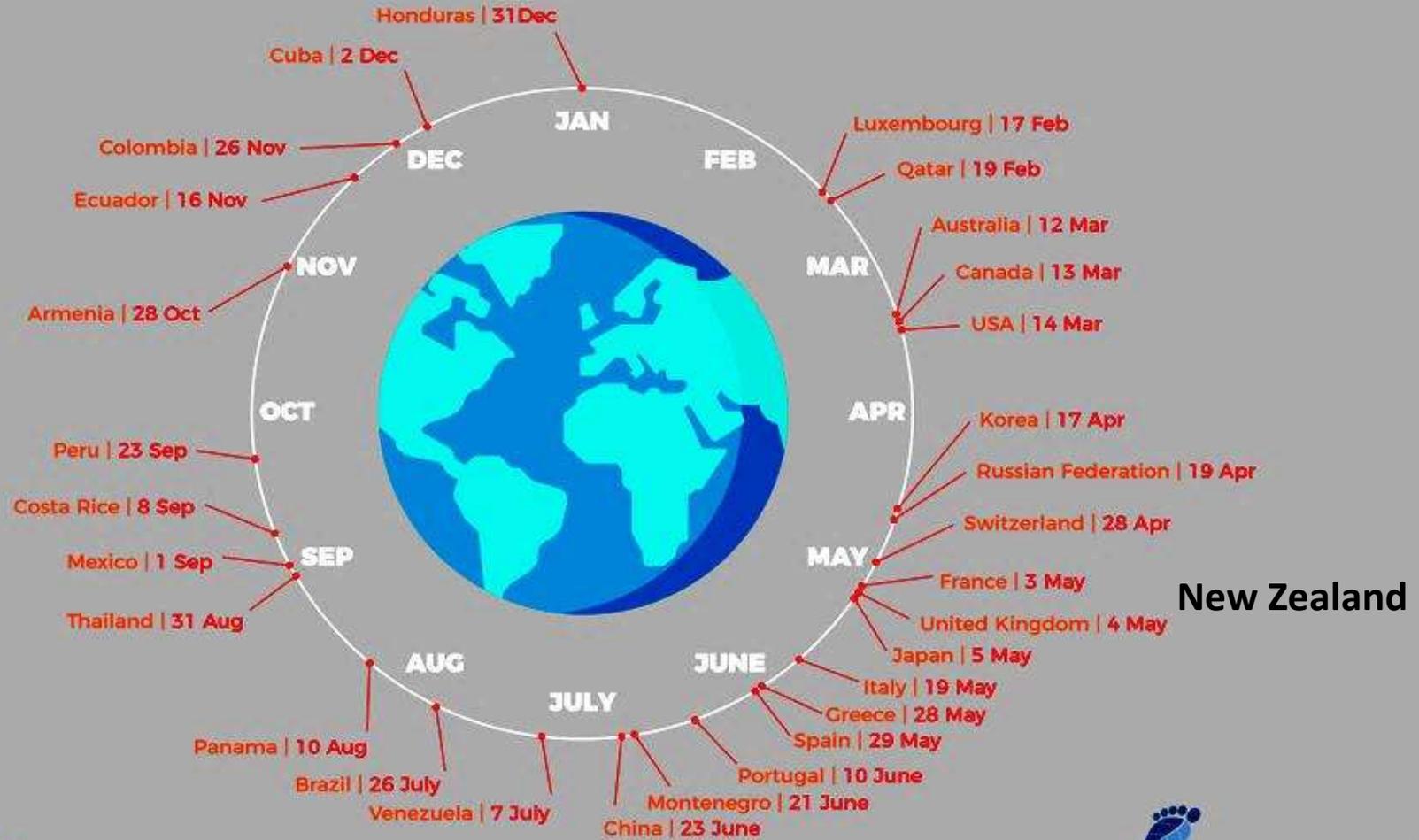
- Massive literature on state & trend of planet
- Good news stories but trajectories stay the same?
- Can we devise a soft-landing thru Interim milestones/'landing points'?
- Resounding YES please!
- Research Questions?
- Reinvent CHCH as innovation centre
  - integrated hub of higher learning
  - Embracing joined-up diversity & complexity



Last March, Tim Jackson put forward the idea of prosperity without growth in a report published by the United Kingdom's [Sustainable Development Commission](#) and followed up with a book of the same name released last November. The book is a best seller (ranked 1,729 on Amazon) and in it he argues convincingly that we can still prosper without adhering to the encoded mantra of expansion and growth that permeates modern market economies.

# Country Overshoot Days 2017

When would Earth Overshoot Day land if the world's population lived like...



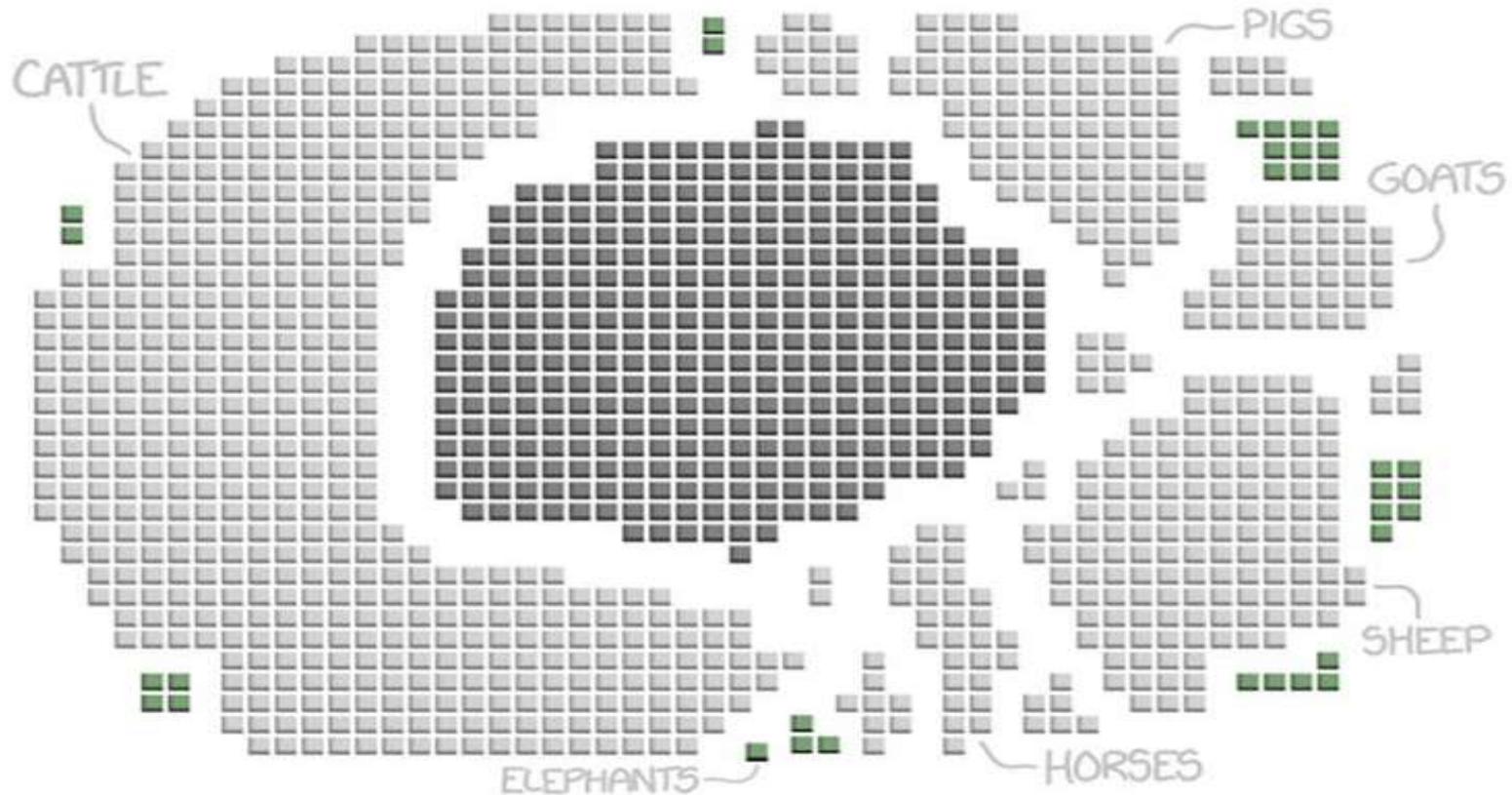
**New Zealand**

**BUT**

# EARTH'S LAND MAMMALS BY WEIGHT

■ = 1,000,000 TONS

■ HUMANS   ■ OUR PETS AND LIVESTOCK   ■ WILD ANIMALS

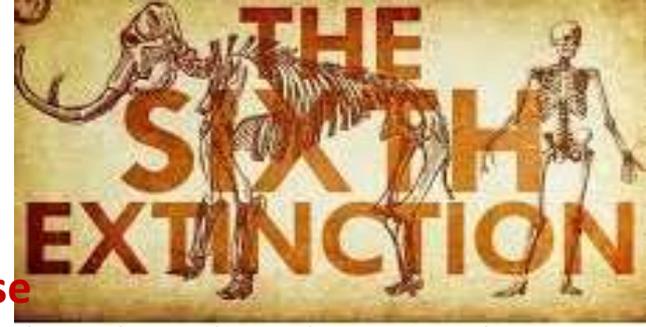


DATA FROM VACLAV SMIL'S *THE EARTH'S BIOSPHERE: EVOLUTION, DYNAMICS, AND CHANGE*, PLUS A FEW OTHER SOURCES.

CC BY 2.0 XKCD

Randall Munroe, a former NASA roboticist who nows draws clever geeky webcomics at [XKCD](#), used data from Vaclav Smil's *The Earth's Biosphere: Evolution, Dynamics, and Change* ("plus a few other sources") to create a visualization of all of Earth's land mammals, which include us, by weight. It does certainly put things in perspective, especially when you compare wild land mammals to us and our livestock and pets.

# The sixth great extinction



As we humans convert more of the **Earth's surface to our use**

- ... we reduce the land available to other species so much that they die. They simply do not have enough to live on. And of course pesticides and actively hunting animals makes it worse.
- On current trends, by 2026 all the large mammals in the wild will be gone... unless we make drastic changes.

## Pollinators

- You may be aware that the loss of bees is a worldwide phenomenon. And it's not just bees. Birds, bats, beetles, moths, butterflies and other creatures that carry the pollen necessary for fertilizing over three quarters of the world's main food crops and 90% of wild flowering plants are declining. Pesticides are a primary cause, with habitat loss and climate change as additional factors.
- *New study suggests insect populations have declined by 75% over 3 decades*  
October, 2017

When our life support system goes, we go [danger of **Pandemics**]



# The Great Transition Initiative

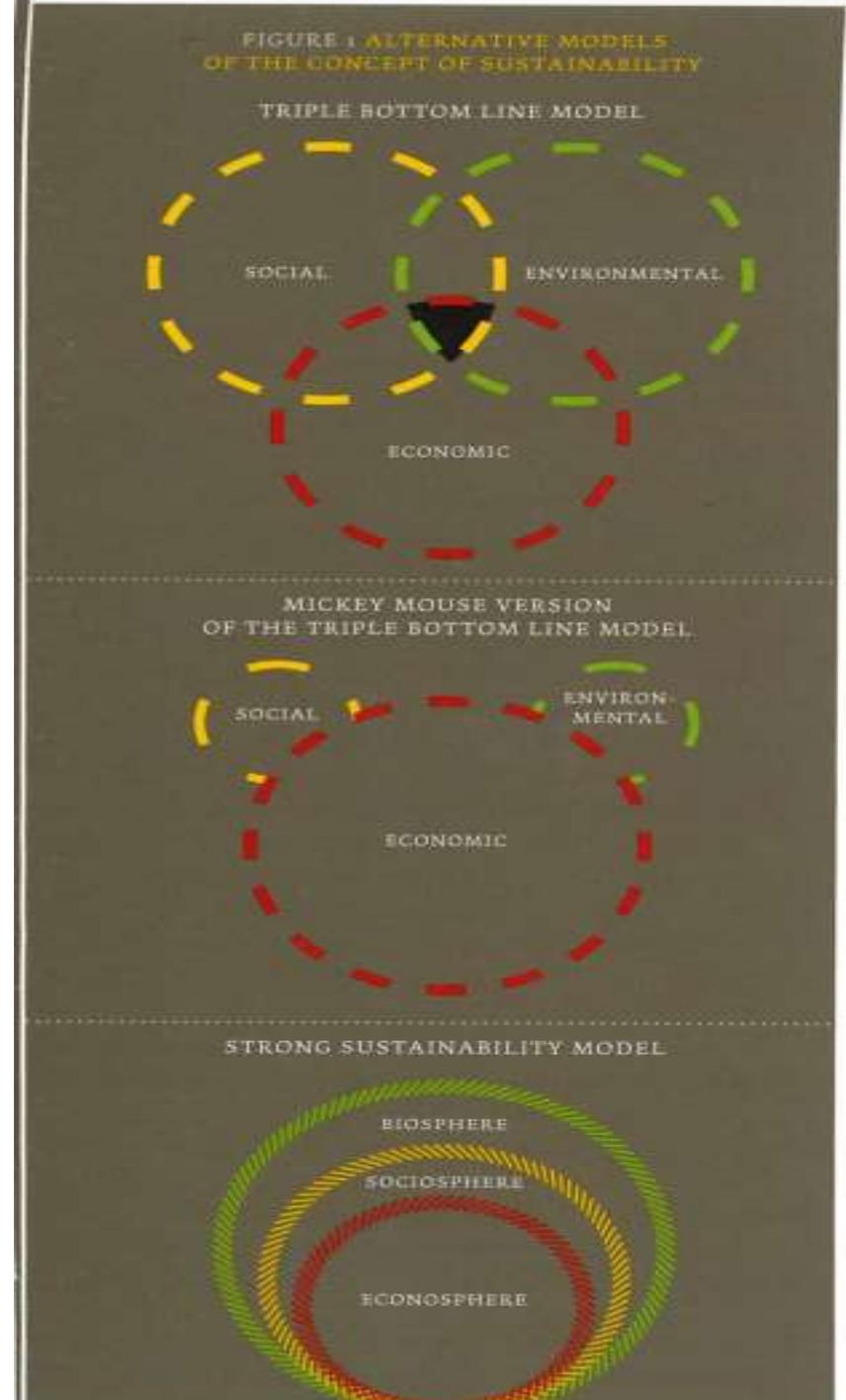
- ... is a vehicle for inspiring **thousands of groups to act as citizen educators** championing a **life-affirming global culture**
- <http://www.inspiringtransition.net/>



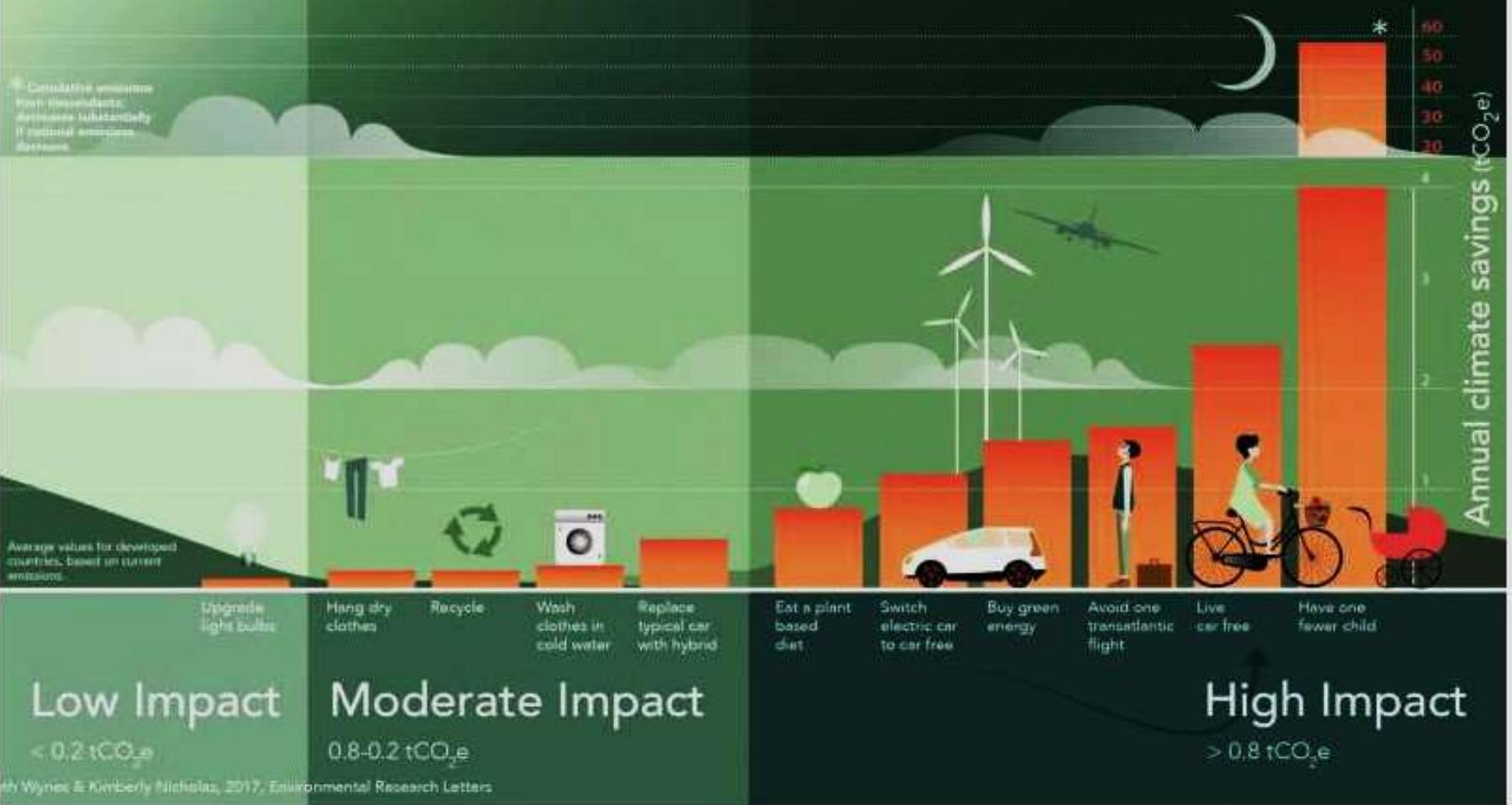
## Definition of Strong

**Sustainability** From *Sustainable Aotearoa NZ (SANZ)* Living within earth limits <http://www.earthslimits.org/>

**Note the Hierarchy of Nested Spheres for Strong Sustainability**



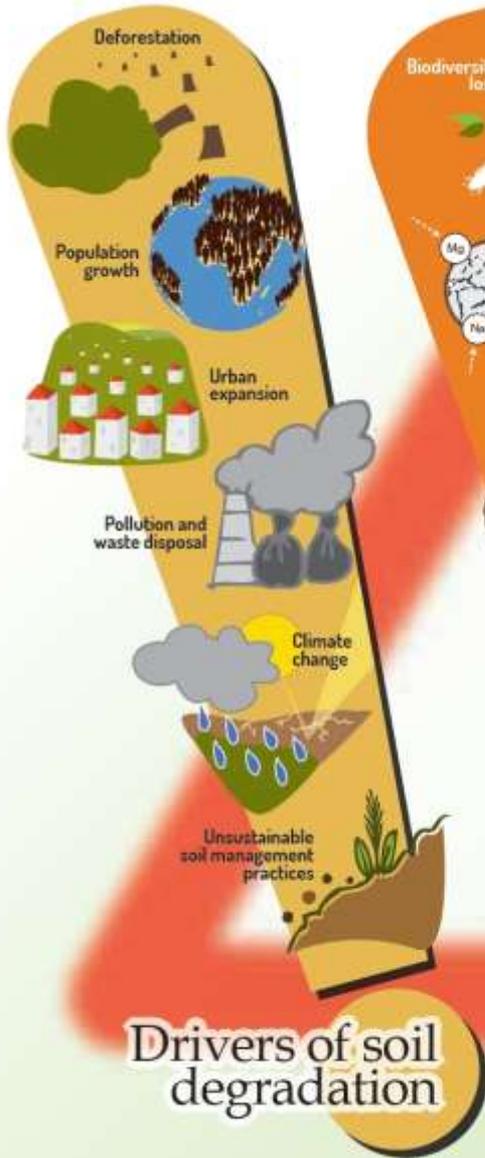
# Personal choices to reduce your contribution to climate change



This infographic shows climate choices. Credit: Seth Wynes/Kimberly Nicholas, *Environmental Research Letters*, 2017

**Personally effective ways to reduce Carbon Footprint**

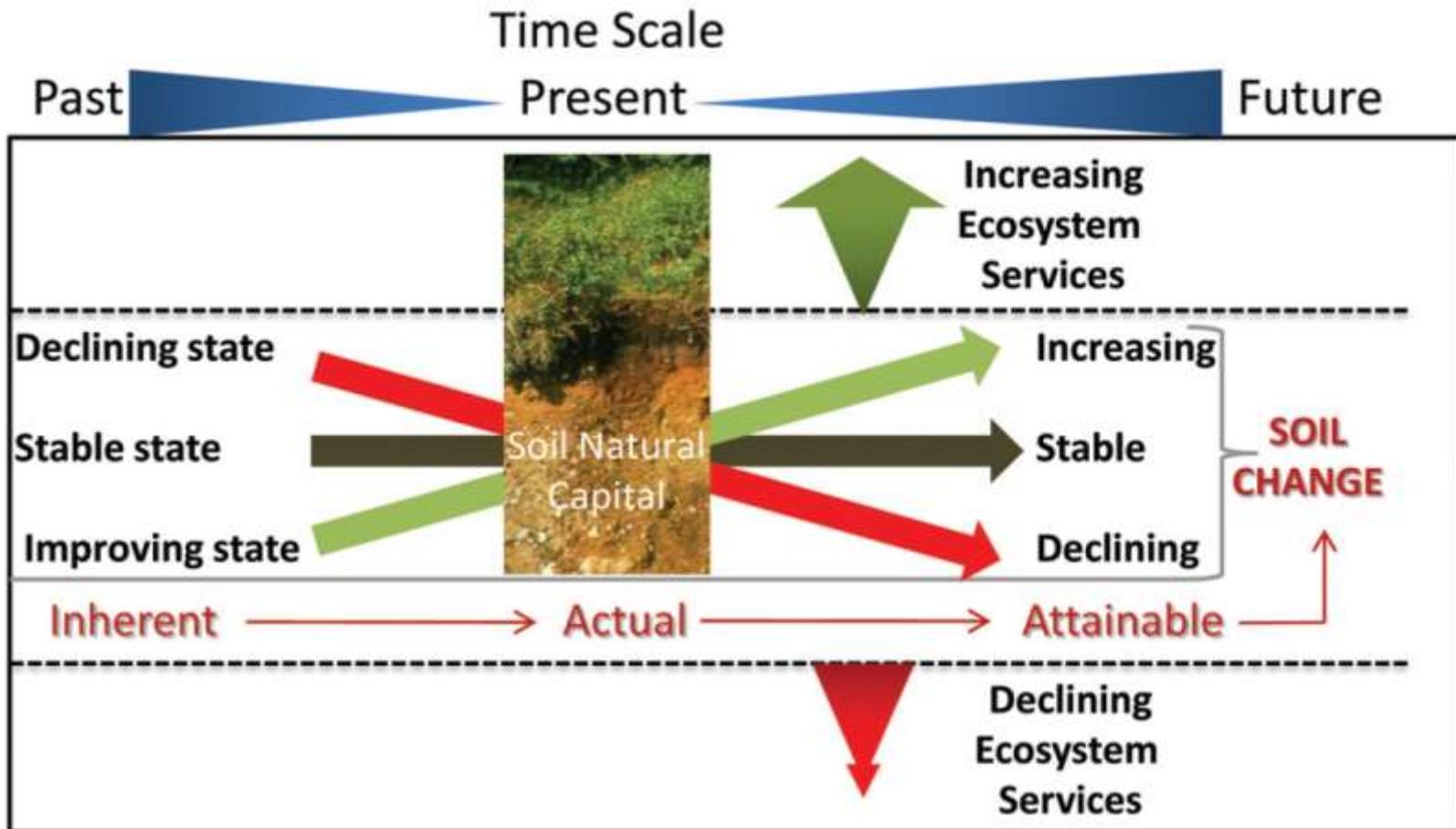
# our Soils under threat



## Solution: sustainable soil management



# Sustainable land & soil management



# Permaculture

## Permaculture Flower

The permaculture journey begins with the Ethics and Design Principles and moves through the key domains required to create a sustainable culture. The spiral evolutionary path joins together these domains, initially at a personal and local level, and then proceeding to the collective and global level.

Some of the specific fields, design systems and solutions that have been associated with the wider view of permaculture are listed below.

### Land & Nature Stewardship

Bio-intensive gardening	Holistic Rangeland Management
Forest gardening	Natural Sequence Farming
Seed saving	Agroforestry
Organic agriculture	Nature based forestry
Biodynamics	Integrated aquaculture
Natural Farming	Wild harvesting & hunting
Keyline water harvesting	Gleaning

### Building

Passive solar design	Earth sheltered construction
Natural construction: materials	Natural disaster resistant construction
Water harvesting & Waste Reuse	Owner building
Biomimicry	Pattern Language

### Tools & Technology

Rouse & creative recycling	Bio-char from forest wastes
Hand Tools	Co-operatives
Bicycles and electric bikes	Micro-hydro & small scale wind
Efficient & low pollution wood stoves	Grid-tied renewable power generation
Fuels from organic wastes	Energy storage
Wood Gasification	Transition engineering

### Education & Culture

Home Schooling	Social ecology
Workshop education	Action Research
Participatory arts and music	Transition culture

### Health & Spiritual Well-Being

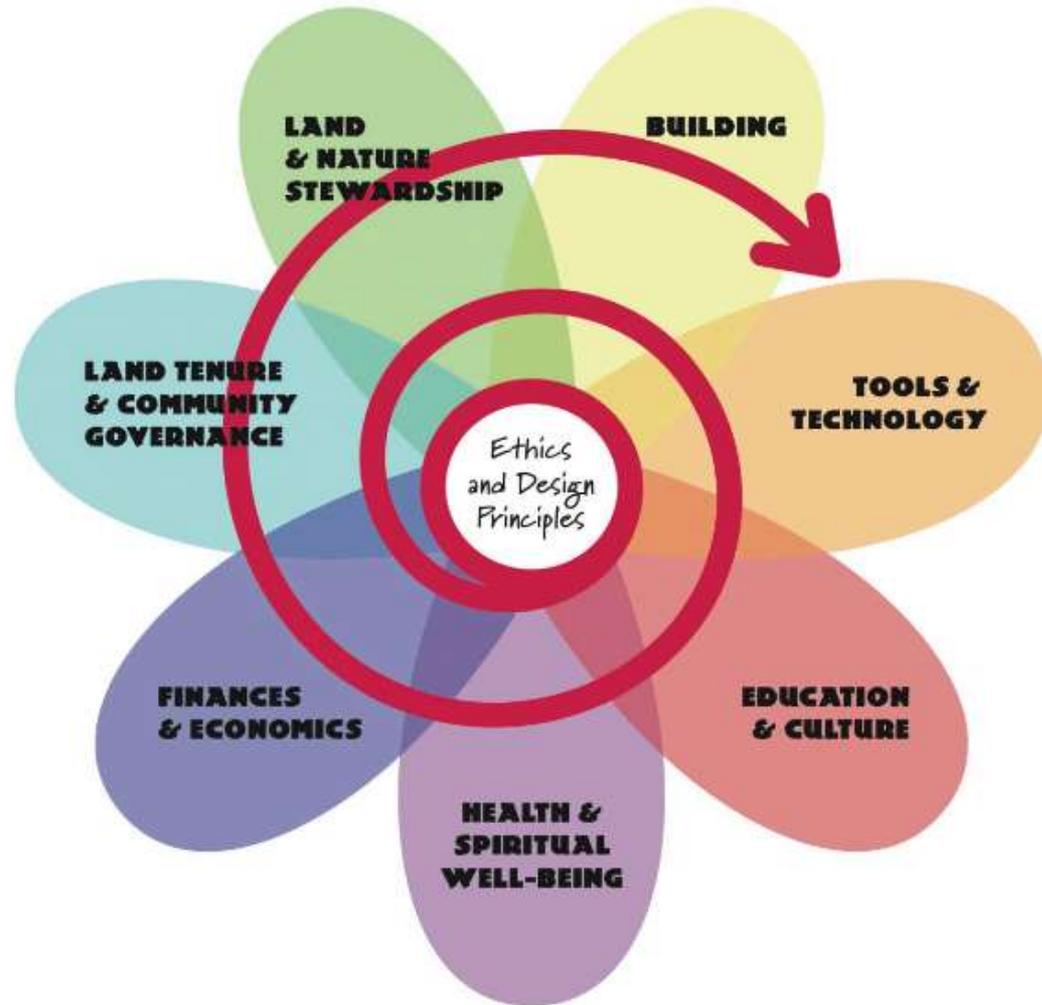
Home birth & breast feeding	Spirit of place, indigenous
Complementary & Wholistic Medicine	cultural revival
Yoga, Tai Chi & other body/mind/spirit disciplines	Dying with dignity

### Finances & Economics

Local and regional currencies	WWOFFing & similar networks
Carpooling, Ride sharing & Car share	Traceable Energy Quotas
Ethical investment & Fair Trade	Life Cycle Analysis & Energy Accounting
Farmers markets & Community Supported Agriculture (CSA)	

### Land Tenure & Community Governance

Cooperatives & Body Corporates	Open Space Technology &
Cohousing & Ecovillages	Consensus Decision Making
Native Title and traditional use rights	



permacultureprinciples.com



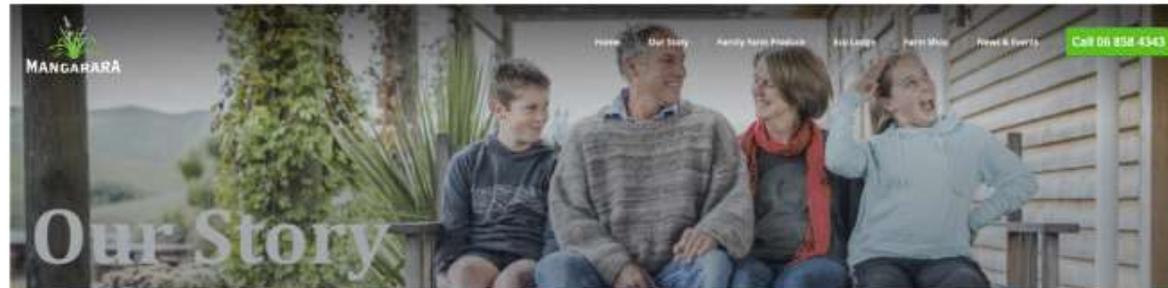
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# Permaculture → holistic grazing

<p><b>CLIMATE</b> 1</p> <p>Design for the various climates of an enterprise, in dry zones or elsewhere. It includes how climate moderates the role of vegetation in the application of the Permaculture Principles.</p>	<p><b>GEOGRAPHY</b> 2</p> <p>The context of the enterprise (situated in the Geography layer) are explored in landscape in its context and with its inherent lines with all physical elements.</p>
<p><b>WATER</b> 3</p> <p>For any enterprise, water availability is basic. It is used to establish the water cycle, available and employ (DAMPIT-1, GODS&amp;N-2) and our capital to establish the effectiveness of the critical resource.</p>	<p><b>ACCESS</b> 4</p> <p>ANUS, EAKU and LEVES are relatively permanent features in landscapes. They present a barrier and should be treated as all of the layers they penetrate connect with.</p>
<p><b>FORESTRY</b> 5</p> <p>Perennial woody plant systems are accumulating, vital and produce the elements in any landscape. They can be complex in their assembly and have potential to critical to support and provide for other systems.</p>	<p><b>BUILDINGS</b> 6</p> <p>An array of structures on any holding are necessary to make the artificial ordinary production systems that humans call agriculture possible. The process and design should follow that of other elements especially Climate, Geography, Water &amp; Access.</p>
<p><b>FENCING</b> 7</p> <p>When we subdivide our landscapes should follow the lines of other more permanent layers. We should only use more flexible fencing infrastructure in order to accommodate the changing requirements and patch that arise in the landscape.</p>	<p><b>SOILS</b> 8</p> <p>Soils developed and continuously easily reworked, with one the foundation of the ecology of life. Management is critical to the development and maintenance of soils. Our soil's production is influenced by consistency other layers, particularly Water, Forestry &amp; Access.</p>
<p><b>ECONOMY</b> 8</p> <p>The analysis of the market and access to them never been easier. Our ability remains in the hands of those, particularly with regard to compliance, though now the idea is being on how we can best manage our enterprise, available &amp; difficult to work.</p>	<p><b>ENERGY</b> 10</p> <p>Working is as flexible as a planet of light and the primary role of humanity must be to reduce photosynthesis of energy opportunity and encourage its positive side effects, with energy of energy systems that harness across geographies from the sun.</p>



Mangarara (The Family Farm) is a 610 hectare/1500 acre hill country farm in Blenheim, Hawke's Bay. It has been stewarded by the Hart Family since 1960. The farm is a diverse mix of lakes, wetlands, past fields, rolling and steep hills, pastures, native and exotic trees. Like a living organism, it is constantly evolving. The evolution of this land and community has really sped up in the last 15 years, towards a regenerated, connected landscape & people. We invite you deeper into the story below.

Our vision

The Family Farm vision has four parts:

1. To produce **healthy & resilient rich food** as part of a resilient & profitable model of **regenerative agriculture**;
2. To balance relationships between nature and production agriculture as part of ecosystem restoration, including a focus on soil health, carbon sequestration and planting native and food producing trees;
3. To utilize the farm and Eco Lodge as a source of **education, accommodation and inspiration**, allowing people to **connect back to nature, food and farming**; and
4. To be open and share the farm's resources, building a **community model** that shows what is possible when we work cooperatively with each other and nature.



## REGRARIANS

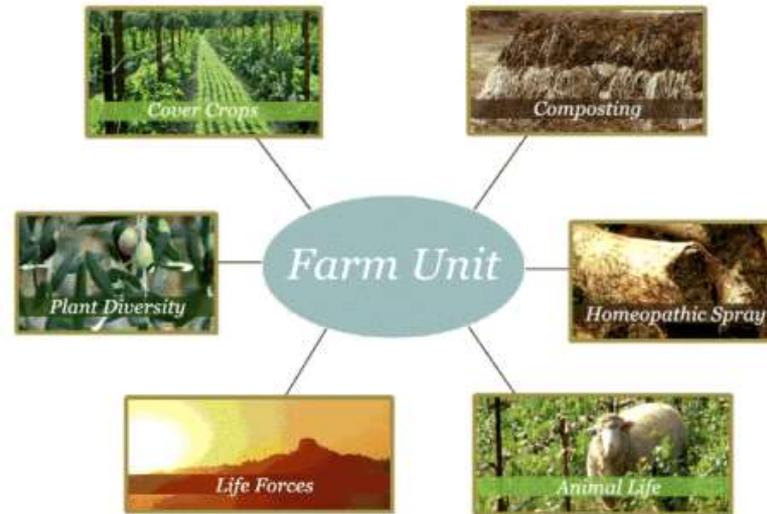
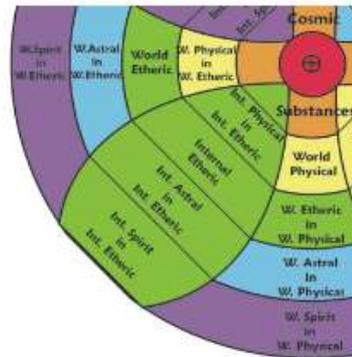
# Biodynamic farming

## Principles of Biodynamic Farming

**Organic**  
**Chemical-Free**  
**Natural Solutions**  
**Biodiversity**  
**Sustainability**

## Principles of Biodynamic Farming

- Whole Farm Organism
- Living Compost Fertility
- Breeding for Farm Adaptation
- Natural Rhythms and Human Timing



# Rescuing Biodiversity

- Extinction of Experience leads to extinction of species
- Authentic place-making must include visibility indigenous nature & culture
- Through protection, restoration, landscape pattern, connectivity, ecological literacy



# The way forward

Transition to a life-affirming global culture

Bring Uncomfortable Truths into Mainstream



Rather (precautionary principle) ...

**do we have answers good-to-go if the manure hits the fan ?**

*The Earth is vast; it is our Home*

The Great Transition Initiative - [www.InspiringTransition.net](http://www.InspiringTransition.net)



**Landing points – Back-casting;  
defining & designing transitions to fit  
people's comfort zone; Research  
opportunities**

**Facilitated Floor Discussion  
May 2018**

Reported on White Board and written  
on post-it notes

# OUTCOMES – FIRST NIGHT (ECOLOGY) WHITEBOARD

## NOTES (black type is directly from board, green is CDM supplementary comment)

- HEALTHY PROCEDURE OUTCOMES/SOS
- DIVERSE LANDSCAPES
- HUMAN ECOLOGICAL FOOTPRINT – and associated domestic animals
- REWILDING OF FERTILE Landcare Research CROP VS ANIMAL PRODUCTION
- GREENING CITIES – JUNGLE – CROPS + BIODIVERSITY
- POPULATION – limits/carrying capacity
- PLANET WILL HAVE TO SUPPORT 10-11 BILLION PEOPLE
- PROBLEM IN CONSUMPTION
- VEGAN/VEGETARIAN VS REDUCEVARIAN
- SELF SUFFICIENT – BASIC NEEDS
- NZ CAN FEED ITSELF – but maybe no surplus for export, to pay for imports?
- RESPECT FOR OTHER LIVING CREATURES – LANGUAGE OF seeing everything as a “RESOURCE” for consumption or to make money from – ENDEMIC/INDIGENOUS
- EARTH other word for soil
- REGENERATIVE AGRICULTURE – REGENERATING soils, productive capacity, water
- RATIONAL MIND vs ORGANIC MIND
- ALTERNATIVE WORLD VIEWS: INDIGENOUS peoples
- URBAN SPRAWL ONTO TOP QUALITY (VERSATILE) soils
- KNOWLEDGE/WISDOM
- TRADING LIVING DENSITY FOR PERSONAL SPACE
- [continued over]

# continued

- LOCAL WORKING + LIVING/SHARING RESOURCES vs individual resources
- COMMUNITY OWNED resources/utilities
- NATIONAL + LOCAL 100 YEAR PLANS, GOVERNMENT
- EDUCATION = CONNECTING TO PRODUCTION – TRANSPARENT RESOURCE USE OF PRODUCTS – SHARE
- EFFECTS OF ELECTRICITY/RADIATION
- (CHRISTCHURCH) INNER CITY – GREEN ZONE – GROWING
- GRASS ROOTS ACTIONS: POWER STRUCTURES DO THEY HAVE A LIMITED TOLERANCE TO COMMUNITY EMPOWERMENT? AND WHAT ACTION WILL THEY TAKE TO MAINTAIN POWER?
- DEVELOPMENT OF COLLECTIVE WILL TO CHANGE
- DON'T LET A GOOD CRISIS GO TO WASTE – IS THIS THE BIG ONE
- WE ARE A CRISIS MANAGEMENT SPECIES
- PEOPLE ONLY TAKE NOTICE OF PETROL ONCE ABOVE 10\$/L AND BAD WEATHER EVENTS
- NO ONE LISTENS TO SCIENTISTS; IS IT THEIR MESSAGING?
- RAISING ECOLOGICAL LITERACY OF PUBLIC
- CRI/HEALTH SCIENTISTS (not) ALLOWED TO SPEAK/WRITE WITHOUT APPROVAL REQUIRED (cf MIKE JOY)
- RETURN TO HUMANISM – RESPECT EACH OTHER
- CHARTER RIGHTS vs DUTIES
- ENABLE FUTURE GENERATIONS + NATURE/OTHER VOICES TO BE HEARD
- SOCIAL EQUITY
- POWER
- TREATY OF WAITANGI
- BASIC BUSINESS PARADIGM

# Landing points - Research opportunities - designing transitions to fit people's comfort zone

- Reuse Repair Recycle
- Transition towns; Transitions/Stepping stones/empowerment/hope/resources
- Practical tools - impact (C footprint) of changing different things in life
- Practical models (Edward Mitchell) – demonstrations; role models; political allies and champions
- Biophilic Cities - <http://biophiliccities.org/wp-content/uploads/2018/04/Coffman-Preprint.pdf>
- Veganism???
- **Harvey Locke & EO Wilson proposed 50% of planet should be wild?**
- Too many pets – 1 large dog (and 5 cats) equivalent to an SUV
- Joined-up thinking; ecology, history & culture in design (legibility)
- Sustainable Aotearoa – Strong Sustainability - <https://www.facebook.com/SANZ-Sustainable-Aotearoa-New-Zealand-1462909530621690/>
- Small is beautiful
- What can the west cut back on; what is reasonable carrying capacity that allows us to share with each other and with the other creatures on the planet? What are implications for population and migration
- What technologies are there for regeneration and life-affirming global culture; relationship to kaitiakitanga
- Ecological Literacy - Messaging
  - Understanding biodiversity, material cycling, decomposition, energy flows, foodwebs, succession, trends, capacity, limits, human dominance and impact
  - Biomimicry – going with the flow, copying nature
  - The role of biodiversity in place-making and well-being (a sense of history and identity)
  - Medical Professionals are generally accepted as promoting preventative measures to maintain public health; ecology now has to advocate for the health of the planet – the stakes are high